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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/563,205	05/15/2006	Reiner Fischer	CS-8715/BC033026	6471
34469 7590 12/28/2009 BAYER CROPSCIENCE LP Patent Department 2 T. W. ALEXANDER DRIVE RESEARCH TRIANGLE PARK, NC 27709				
EXAMINER				
PAK, JOHN D				
ART UNIT		PAPER NUMBER		
1616				
NOTIFICATION DATE		DELIVERY MODE		
12/28/2009		ELECTRONIC		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary

Application No.

10/563,205

Applicant(s)

FISCHER ET AL.

Examiner

John Pak

Art Unit

1616

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 14-26 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 14-26 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/55/08)
Paper No(s)/Mail Date 8/11/06
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date ____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: ____

Claims 14-26 are pending in this application.

Claims 14-23 and 25-26 are generic to the following disclosed patentably distinct species: compounds of formula (I) such as spiromesifen and compounds of formula (II) such as flubendiamide. The species are independent or distinct because as disclosed the different species have mutually exclusive characteristics and distinct chemical structures for each identified species. In addition, these species are not obvious variants of each other based on the current record.

Applicant is required under 35 U.S.C. 121 to elect a single disclosed species for prosecution on the merits to which the claims shall be restricted if no generic claim is finally held to be allowable.

There is an examination and search burden for these patentably distinct species due to their mutually exclusive characteristics. The species require a different field of search (e.g., searching different classes/subclasses or electronic resources, or employing different search queries); and/or the prior art applicable to one species would not likely be applicable to another species; and/or the species are likely to raise different non-prior art issues under 35 U.S.C. 101 and/or 35 U.S.C. 112, first paragraph.

Applicant is advised that the reply to this requirement to be complete must include (i) an election of a species to be examined even though the requirement may be traversed (37 CFR 1.143) **and (ii) identification of the claims encompassing the elected species**, including any claims subsequently added. An argument that a

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claim is allowable or that all claims are generic is considered nonresponsive unless accompanied by an election.

The election of the species may be made with or without traverse. To preserve a right to petition, the election must be made with traverse. If the reply does not distinctly and specifically point out supposed errors in the election of species requirement, the election shall be treated as an election without traverse. Traversal must be presented at the time of election in order to be considered timely. Failure to timely traverse the requirement will result in the loss of right to petition under 37 CFR 1.144. If claims are added after the election, applicant must indicate which of these claims are readable on the elected species.

Should applicant traverse on the ground that the species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the species unpatentable over the prior art, the evidence or admission may be used in a rejection under 35 U.S.C. 103(a) of the other species.

Upon the allowance of a generic claim, applicant will be entitled to consideration of claims to additional species which depend from or otherwise require all the limitations of an allowable generic claim as provided by 37 CFR 1.141.

During a telephone conversation with Mr. Henderson on 11/18/2009 a provisional election was made with traverse to prosecute the invention of spiromesfen (compound

I-b-1) as the single disclosed species of a compound of formula (I) and flubendiamide (compound II-1) as the single disclosed species of a compound of formula (II), claims 14-26. See claim 24, which has the structures of both compounds. Affirmation of this election must be made by applicant in replying to this Office action.

It is noted that Mr. Henderson informed the Examiner of a typographical error in the formula for compound II-1 in claim 24 during the same telephone conversation of 11/18/2009. The J substituent in the phenyl ring having the diamide structure is supposed to be iodine, and it will be so examined. Applicant will correct the typographical error in response to this Office action.

Claims 14-26 will presently be examined to the extent that they read on the elected subject matter of record.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 14-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over the combined teachings of WO 02/87334¹, Fischer et al. (US 5,262,383) and Tohnishi

¹ WO 02/87334 was cited by applicant in the IDS of 8/11/06, document AJ on page 7 of 8. U.S. 2004/0077500 was submitted as an English translation of WO 02/87334. It is noted for the record that WO 02/87334 is being applied here as a primary prior art document. All references to page and paragraph numbers are to its English translation document, US 2004/0077500.

et al. (US 6,603,044) in view of Fischer et al. (US 2003/0100604) and Fischer et al. (US 2003/0114312).

WO 02/87334 teaches that although phthalamide derivatives are known for their insecticidal or acaricidal activity, many noxious organisms are difficult to control by the use of a single phthalamide derivative (paragraphs 2 and 4). WO 02/87334 discloses phthalic diamides, including **flubendiamide** (elected compound II-1), in combination with another insecticide, acaricide or nematocide (paragraphs 6-17; see the second preferred compound in paragraph 24 for flubendiamide; see also compound no. 130 on page 7 and the second compound in claim 3 for flubendiamide; claims 1-6) or fungicide or herbicide (paragraphs 62-67). Phthalamides of WO 02/87334 can be combined with numerous structurally divergent insecticides, acaricides and/or nematocides (paragraphs 28-31), including **spiromesifen** (page 7, paragraph 29, right column, second to the last line). 0.1-50 wt% active ingredient concentration and wide ratio range, 0.05 to 2000 : 1 (second active : phthalamide) is disclosed (paragraph 32). Various formulation types are disclosed, including solid, liquid or power, which are made in accordance with "conventional method in the pesticide making" wherein "adjuvants and the like" are added to form emulsions, powders, granules, flowables, etc. (paragraph 33). Wide spectrum of pests to be controlled is disclosed (paragraphs 35-47). The pest control from the combination of ingredients is disclosed as **synergistic** (abstract; paragraph 1). Plurality of noxious organisms are controlled by the combination of ingredients (paragraph 5).

Fischer et al. disclose spiromesifen in columns 29-30, the 14th compound. A broad spectrum insecticidal and acaricidal activity is disclosed, including control of animal pests (column 127, line 30 to column 130, line 21; see in particular column 127, line 31 and column 128, lines 52-58). Formulation with excipients is disclosed (column 130, line 27 to column 131, line 24; in particular, column 130, line 40, "surface active agents"). Formulation with other active compounds such as insecticides is disclosed (column 131, lines 28-32). Active ingredient amount of 0.1 to 95 wt% is disclosed (column 131, lines 24-26).

Tohnishi et al. disclose flubendiamide (columns 25-26, compound no. 124). Tohnishi's phthalamides, including flubendiamide, are suitable for controlling various insect pests, e.g. agricultural insect pests, horticultural insect pests, sanitary insect pests (see from column 40, line 35 to column 41, line 47). Formulation with adjuvants such as surfactants is disclosed (see from column 41, line 48 to column 42, line 44). Formulation with other active compounds such as acaricides and nematocides is disclosed (column 43, lines 8-17). Active ingredient amount of 0.01 to 80 wt% is disclosed (column 42, lines 53-58).

The two secondary references by Fischer et al. are cited to show that spiromesifen (applicant's elected compound I-b-1) has been taught to combine beneficially and synergistically with numerous structurally divergent pesticides against broad spectrum of pests. See in US 2003/0100604, paragraphs 4-109, 148-168; and in US 2003/0114312, paragraphs 3-183, 222-242.

The difference between the claimed invention and the cited prior art references is that there is no specific exemplified combination of spiromesfin + flubendiamide. However, WO 02/87334 comes pretty close in disclosing synergistic combination of flubendiamide with various other pesticides, **including spiromesfin**. The motivation to select these two ingredients arise from their known individual active pest control activities (Fischer et al. Tohnishi et al.), and the fact that combining the two would be expected to provide improved pest control. Further motivation arises from the fact that spiromesfin is not only taught to be combined with other insecticides (Fischer et al., US 5,262,383), but also from the fact that spiromesfin has been known to be advantageously combined with so many other known insecticides (Fischer et al. references US 2003/0100604 and US 2003/0114312). As a result, there would have been sufficient motivation and suggestion for one of ordinary skill in the art to combine spiromesfin with flubendiamide, as claimed.

In this regard, applicant's specification data has been reviewed, but the data there cannot be considered sufficient evidence of nonobviousness. First, it must be noted that evidence of nonobviousness, if any, must be commensurate in scope with that of the claimed subject matter. In re Kulling, 14 USPQ2d 1056, 1058 (Fed. Cir. 1990); In re Lindner, 173 USPQ 356, 358 (CCPA 1972). Here, structural variations for compounds of formulae I and II are so numerous and significant that it takes more than four pages to list them all – see claim 14. The page numbers are merely indicative of

the thousands of structurally divergent compounds encompassed by the instant claims; whereas the specification data is directed to only one formula I compound + one formula II compound. Clearly, such limited data cannot be probative for the entire scope of the instant claims. Second, even with respect to the combination of spiromesfin (I-b-1) + flubendiamide (II-1), applicant's data is not persuasive. Table A (page 34) shows the combination of ingredients to provide 85% control, but the sum of the individual components provides, taken as a sum of their individual activity, 95% control. Such data is not persuasive at all because the combination is not unexpectedly superior to the sum of individual components. Table B shows, for one data point (i.e. one ratio), the combination of I-b-1 + II-1 to provide 95% control, whereas the sum of the individual components provides 90% control. It is not clear how significant 95% is vs. 90%. Such numerically close data could be due to several factors, which are not related to unexpected data such as normal statistical variation, insignificant difference in activity, and small sample size producing unreliable and unrepeatable data. Moreover, in light of the teachings of WO 02/87334, slightly higher activity would have been expected because WO 02/87334 teaches synergistic effect when spiromesfin is combined with flubendiamide.

Therefore, the claimed invention, as a whole, would have been prima facie obvious to one of ordinary skill in the art at the time the invention was made, because every element of the invention and the claimed invention as a whole have been fairly disclosed or suggested by the teachings of the cited references.

Any inquiry concerning this communication or earlier communications from the Examiner should be directed to JOHN PAK whose telephone number is **(571)272-0620**. The Examiner can normally be reached on Monday to Friday from 8 AM to 4:30 PM.

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's SPE, Johann Richter, can be reached on **(571)272-0646**.

The fax phone number for the organization where this application or proceeding is assigned is **(571)273-8300**. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (571)272-1600.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/John Pak/
Primary Examiner, Art Unit 1616